WHAT IS CLAIMED IS:

1   1.   A computer-implemented method for report selection in a system that

2   provides a plurality of reports, comprising:

3   populating a database with selected data elements of a plurality of data

4   types;

5   creating a database content table that indicates the data types of the data

6   elements present in the database;

7   establishing a report table containing for each report a report identifier

8   and an associated set of report requirements, each set of report requirements

9   identifying a set of data types required for the associated report; and

10   outputting a set of report identifiers for which the data types of data

11   elements in the database satisfy the associated sets of report requirements.

1   2.   The method of claim 1, further comprising:

2   creating a report description table that associates report names with the

3   report identifiers; and

4   displaying a list of report names that correspond to the set of report

5   identifiers.

1   3.   The method of claim 2, wherein the list of report names displayed are

2   selectable and linked to respective report functions that generate report data in

3   accordance with predefined formats.

1   4.   The method of claim 3, further comprising reading the selected data

2   elements from a sequential data file prior to populating the database.

1   5.   A computer-implemented method for selection of reports of log data

2   generated by software executing on a host data processing system, wherein the

3   log data are stored by the host system in a sequential log file of log records of

4   different log record types, the method comprising:

5   establishing a report table containing for each report a report identifier

6   and an associated set of report requirements, each set of report requirements

7   including a set of log-record-type identifiers indicating which of the log record

8   types contain log data required for the associated report;

9   reading selected log records from the log file;

10   storing log data from the selected log records in a relational log-data

11   database;

12   creating a database content table that indicates the log record types of the

13   selected log records; and

14   outputting a set of report identifiers of reports for which the log data in the

15   database content data table satisfies the set of report requirements of associated

16   report definitions.

1   6.   The method of claim 5, further comprising for each log record type of the

2   selected log records, storing log data from the selected log records of the log

3   record type in a respective log data table.

1   7.   The method of claim 6, further comprising:

2   reading a plurality of sets of selected log records from the log file;

3   storing log data from the plurality of sets of selected log records in

4   respective relational log-data databases;

5   creating respective database content tables for the respective relational

6   log-data databases.

1   8.   The method of claim 5, further comprising:

2   reading a plurality of sets of selected log records from the log file;

3   storing log data from the plurality of sets of selected log records in

4   respective relational log-data databases;

5   creating respective database content tables for the respective relational

6   log-data databases.

1 9.   The method of claim 8, further comprising:

2   creating a report description table that associates report names with the

3 report identifiers; and

4   displaying a list of report names that correspond to the set of report

5 identifiers.

1 10.   The method of claim 9, wherein the list of report names displayed are

2 selectable and linked to respective report functions that generate report data in

3 accordance with predefined formats.

1 11.   The method of claim 5, further comprising:

2   creating a report description table that associates report names with the

3 report identifiers; and

4   displaying a list of report names that correspond to the set of report

5 identifiers.

1 12.   The method of claim 11, wherein the list of report names displayed are

2 selectable and linked to respective report functions that generate report data in

3 accordance with predefined formats.

1 13.   A computer-implemented method for processing log data generated by

2 software executing on a host data processing system, wherein the log data are

3 stored by the host system in a sequential log file of log records of different log

4 record types, the method comprising:

5   reading selected log records from the log file in response to a first request

6 that includes a first code indicating at least one user-specified log record type;

7   transmitting the selected log records from the host system to a second data

8 processing system;

9   converting log data from the selected log records to a format suitable for

10 storage in a relational database and storing the data of the second format in a

11 relational database by the log record types, wherein the selected log records are

12   converted and stored in the relational database at the second data processing

13   system;

14   establishing a report table containing for each report a report identifier

15   and an associated set of report requirements, each set of report requirements

16   including a set of log-record-type identifiers indicating which of the log record

17   types contain log data required for the associated report;

18   creating a database content table that indicates the log record types of the

19   selected log records; and

20   outputting a set of report identifiers of reports for which the log data in the

21   database content data table satisfies the set of report requirements of associated

22   report definitions.

1   14.   The method of claim 13, further comprising for each log record type of the

2   selected log records, storing log data from the selected log records of the log

3   record type in a respective log data table.

1   15.   The method of claim 14, further comprising:

2   reading a plurality of sets of selected log records from the log file;

3   storing log data from the plurality of sets of selected log records in

4   respective relational log-data databases;

5   creating respective database content tables for the respective relational

6   log-data databases.

1   16.   The method of claim 13, further comprising:

2   creating a report description table that associates report names with the

3   report identifiers; and

4   displaying a list of report names that correspond to the set of report

5   identifiers.

1   17.   The method of claim 13, wherein the list of report names displayed are

2   selectable and linked to respective report functions that generate report data in

3   accordance with predefined formats.

1   18.   An apparatus for report selection in a system that provides a plurality of

2   reports, comprising:

3   means for populating a database with selected data elements of a plurality

4   of data types;

5   means for creating a database content table that indicates the data types of

6   the data elements present in the database;

7   means for establishing a report table containing for each report a report

8   identifier and an associated set of report requirements, each set of report

9   requirements identifying a set of data types required for the associated report;

10   and

11   means for outputting a set of report identifiers for which the data types of

12   data elements in the database satisfy the associated sets of report requirements.

1   19.   An apparatus for selection of reports of log data generated by software

2   executing on a host data processing system, wherein the log data are stored by

3   the host system in a sequential log file of log records of different log record types,

4   the method comprising:

5   means for establishing a report table containing for each report a report

6   identifier and an associated set of report requirements, each set of report

7   requirements including a set of log-record-type identifiers indicating which of the

8   log record types contain log data required for the associated report;

9   means for reading selected log records from the log file;

10   means for storing log data from the selected log records in a relational log-

11   data database;

12   means for creating a database content table that indicates the log record

13   types of the selected log records; and

14   means for outputting a set of report identifiers of reports for which the log

15 data in the database content data table satisfies the set of report requirements of

16 associated report definitions.

1   20.   A log data processing system, comprising:

2   a host data processing system configured for execution of a plurality of

3   application programs, the host system further configured to store log data

4   pertaining to the application programs in a sequential log file of log records of

5   different log record types; and

6   a second data processing system coupled to the host system, the second

7   system configured to initiate reading of selected log records from the log file in

8   response to a first request that includes a first code indicating at least one user-

9   specified log record type, convert log data from the selected log records to a

10 format suitable for storage in a relational database, and store the data of the

11 second format in a relational database by the log record types, wherein the

12 second data processing system is further configured to establish a report table

13 containing for each report a report identifier and an associated set of report

14 requirements, each set of report requirements including a set of log-record-type

15 identifiers indicating which of the log record types contain log data required for

16 the associated report, create a database content table that indicates the log record

17 types of the selected log records, and output a set of report identifiers of reports

18 for which the log data in the database content data table satisfies the set of report

19 requirements of associated report definitions.